



# ***Viper Strike***



***April 2006***

***Steve Borden  
DPM Submunitions***

# Viper Strike Overview



Diameter	5.5 in.
Wingspan	36 in.
Length	36 in.
Weight	42 lb.
Glide Ratio	10:1
Explosives	2.3 lb.
FOV	14°

- Discrete effects precision munition
  - Semi-active laser (SAL) seeker
  - Near 0m CEP
  - Small warhead
  - Hit-to-kill

**Low Collateral Damage**

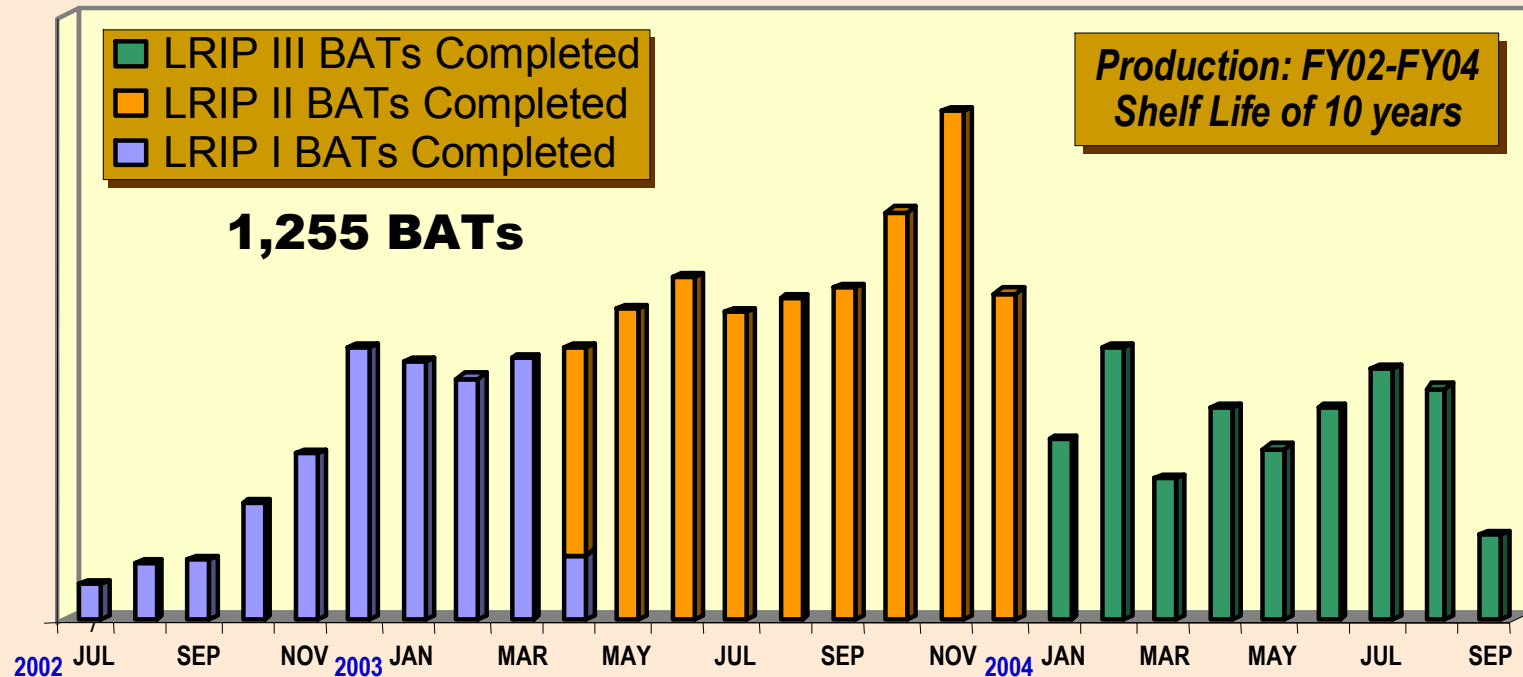
- Production airframe/seeker
- Successful Army demos (9 for 9)

## Path Ahead: Demonstrate improvements in 2006

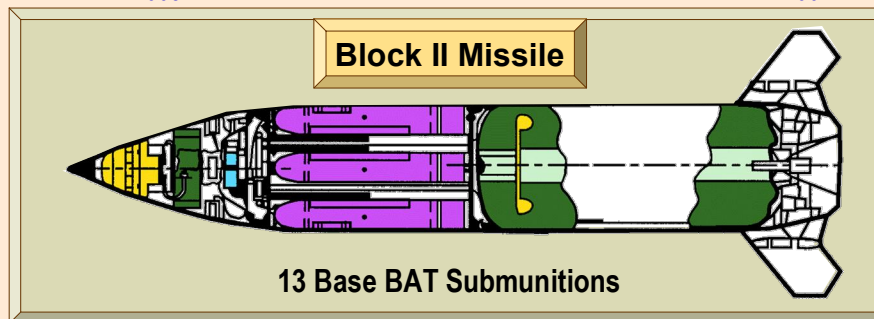
- GPS Extend range to 10+ miles
- Frag belt Personnel targets, plus "less than lethal" mode
- Datalink Max range moving targets; multiple near-simultaneous target attack



# ATACMS Conversion



**No ATACMS  
Funding to  
Maintain or Test  
the Current  
Inventory**

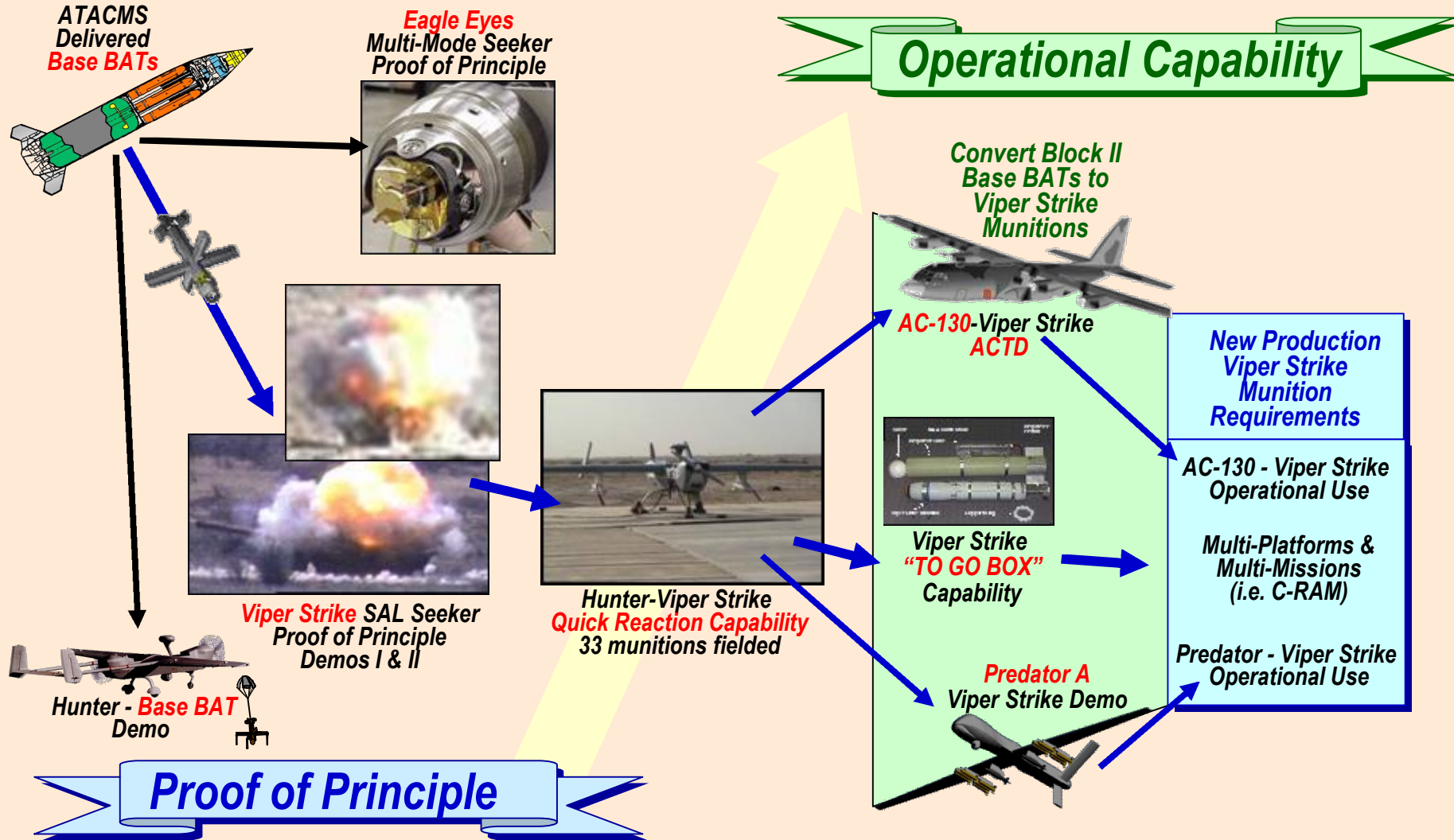


**The Viper Strike Solution-**

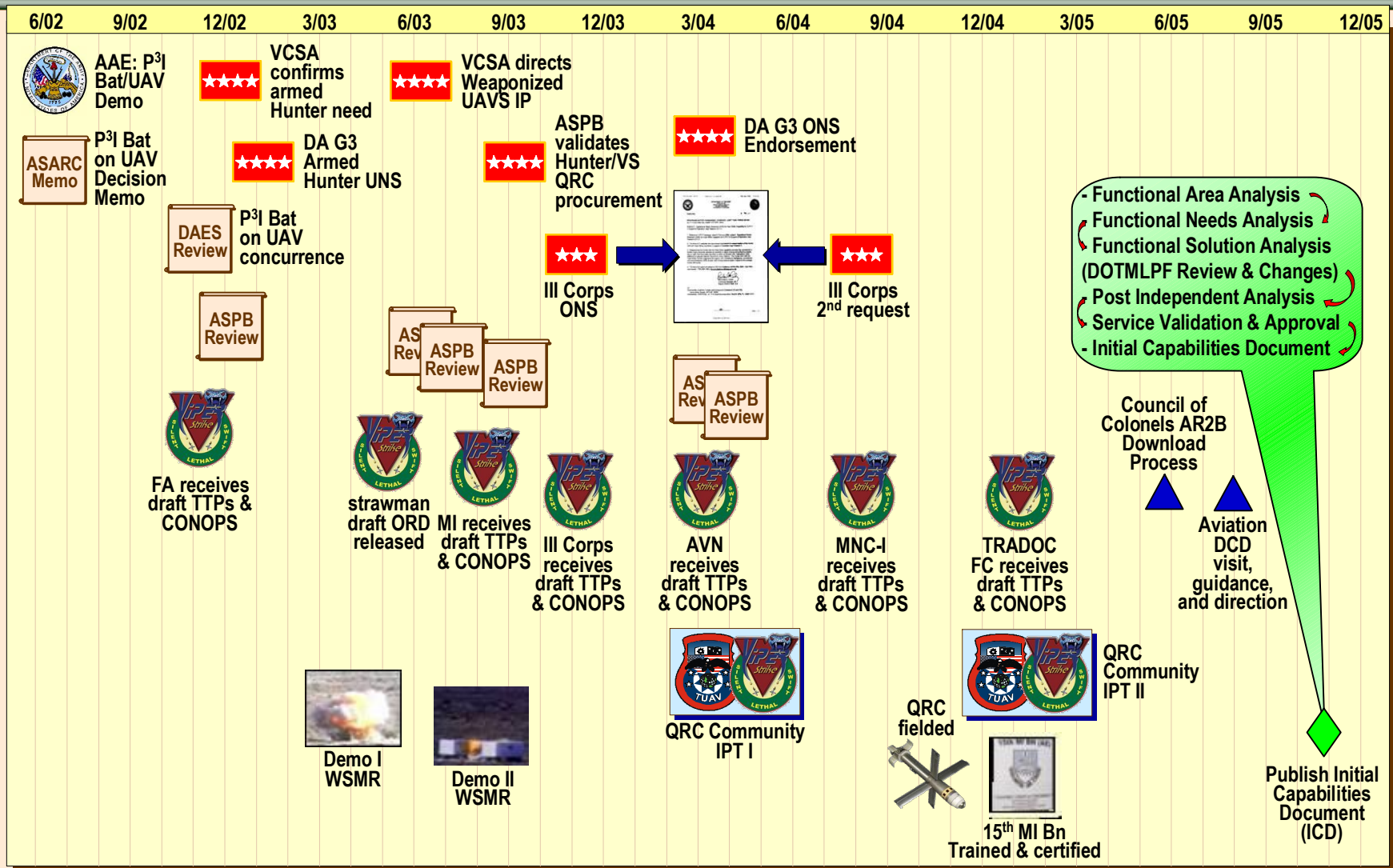
- Shelf Life Issue
- Maintenance Funding
- Unitary Requirement
- Viper Strike Requirement
- Bridges VS New Production



# Viper Strike Lineage



# Viper Strike's Evolving Requirement





# **Current Capabilities**

- **Launch Altitudes – 8K' to 13K' and No Need to Maneuver**
- **Low Circular Error of Probability – Less than One Meter CEP**
- **Low Collateral Damage – 16 Meters for Urban Targets**
- **Top Down Blast Effect – Limits Damage in Urban Canyons**
- **Moving Targets – Up to 40 kph with Some Target Maneuvering**
- **Danger Close – ATEC Approved at 50 Meters**
- **Double the Payload – Half the Weight of Hellfire**
- **Multiple Laser Designations – Air, Buddy, or Ground**
- **Day or Night Capability – All Laser Designators**
- **Stand Off – 1/2km to 1km Current; >5km w/GPS**
- **Current HE and Kinetic Warheads plus Frag Sleeve Funded**
- **Only Current Munition for Class II & III Weaponized UAVS**
- **Capability Fielded in OIF – Proven & Certified**
- **Active Production Facility at Redstone Arsenal**
- **No Munition Restrictions Beyond Aircraft Limitations**



# ***Current Missions***

- ***“Golden Shots”***
  - ***Pinpoint a moving armored car in a motorcade***
- ***Restricted (Minimal Collateral Damage) Urban Targets***
  - ***Reach down into cordoned urban canyons***
  - ***Near vertical angle of attack projects warhead shrapnel into the target and ground minimizing collateral damage***
- ***Convoy & TOC ISR & Security***
  - ***At 10K' AGL, UAVs relatively unseen, unheard, and undetectable***
  - ***Allows observation of enemy preparations, IED placement, and ambush points***
- ***Key Infrastructure ISR & Armed Response***
  - ***Refineries, pipelines, politically sensitive locations, etc.***
- ***Monitor critical situations with timely response***
  - ***Undetected observation without ground troops in harm's way***
- ***Army asset under Army control***



# **Operation Iraqi Freedom Fielded & Certified!**



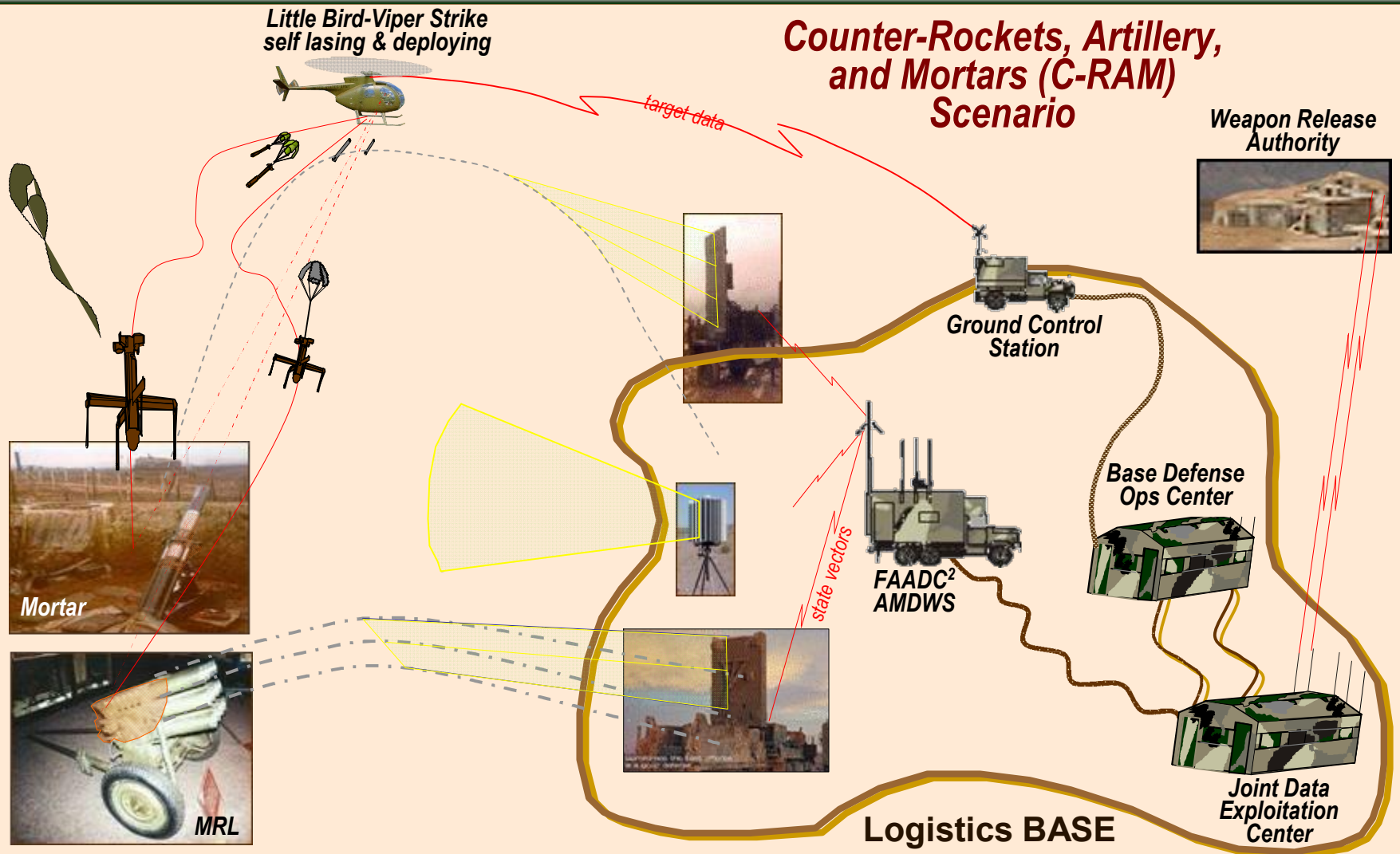




# ***Viper Strike C-RAM Demo***



# Viper Strike in the C-RAM Mission







# ***Current & Future Carriers***



***Fire Scout***



***AC-130 ACTD***



***Warrior***



***Predator A***



***Hunter***



***Little Bird***

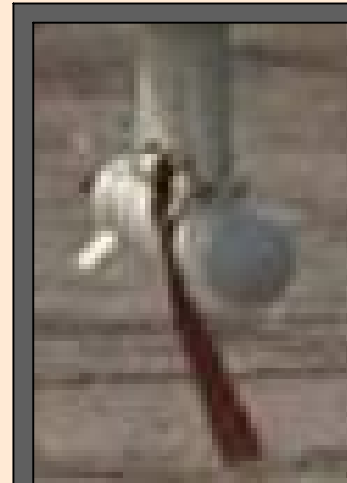
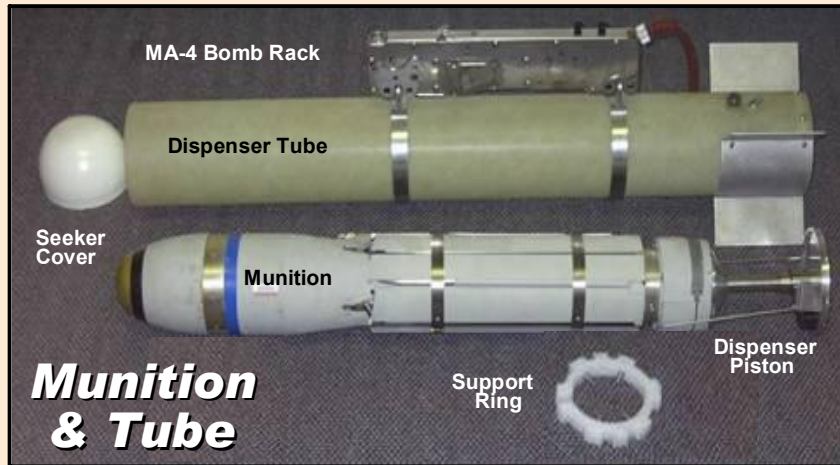




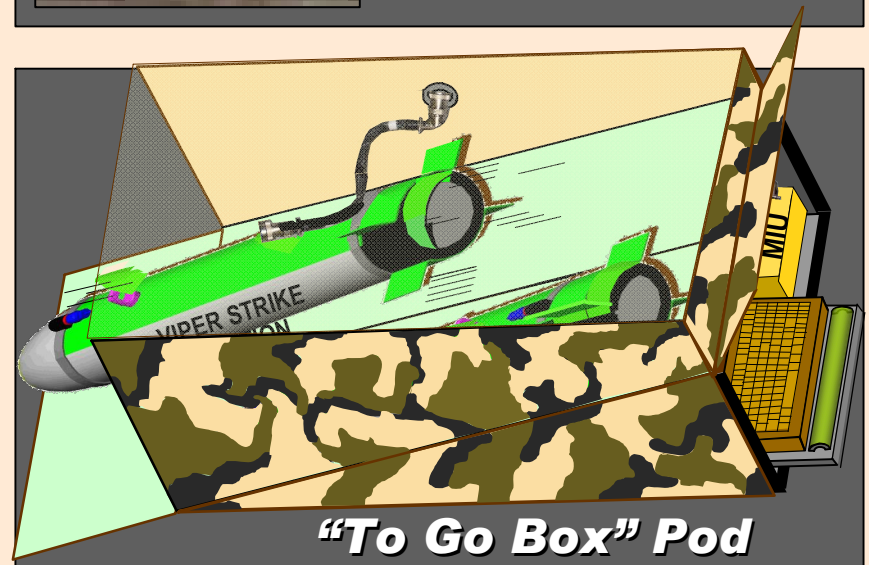
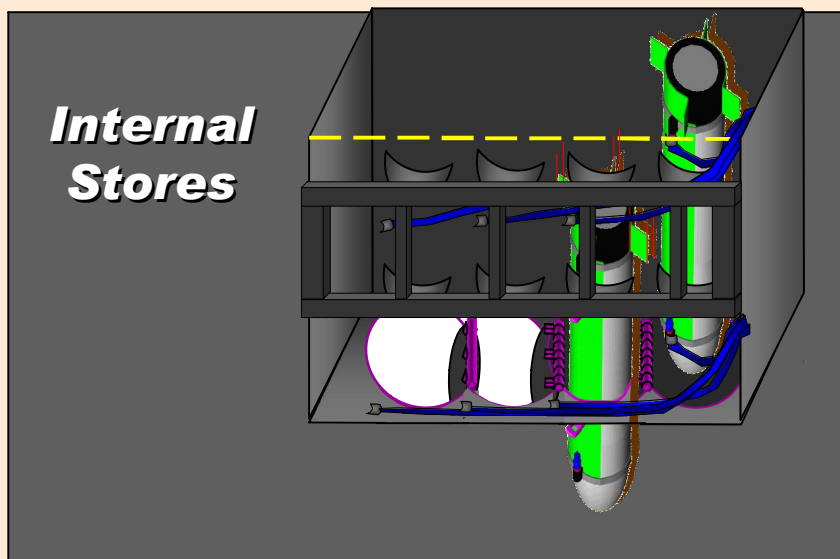
# ***Viper Strike Navigator***



# Current & Future Packages



**External Stores**



# Spiral Improvement Matrix

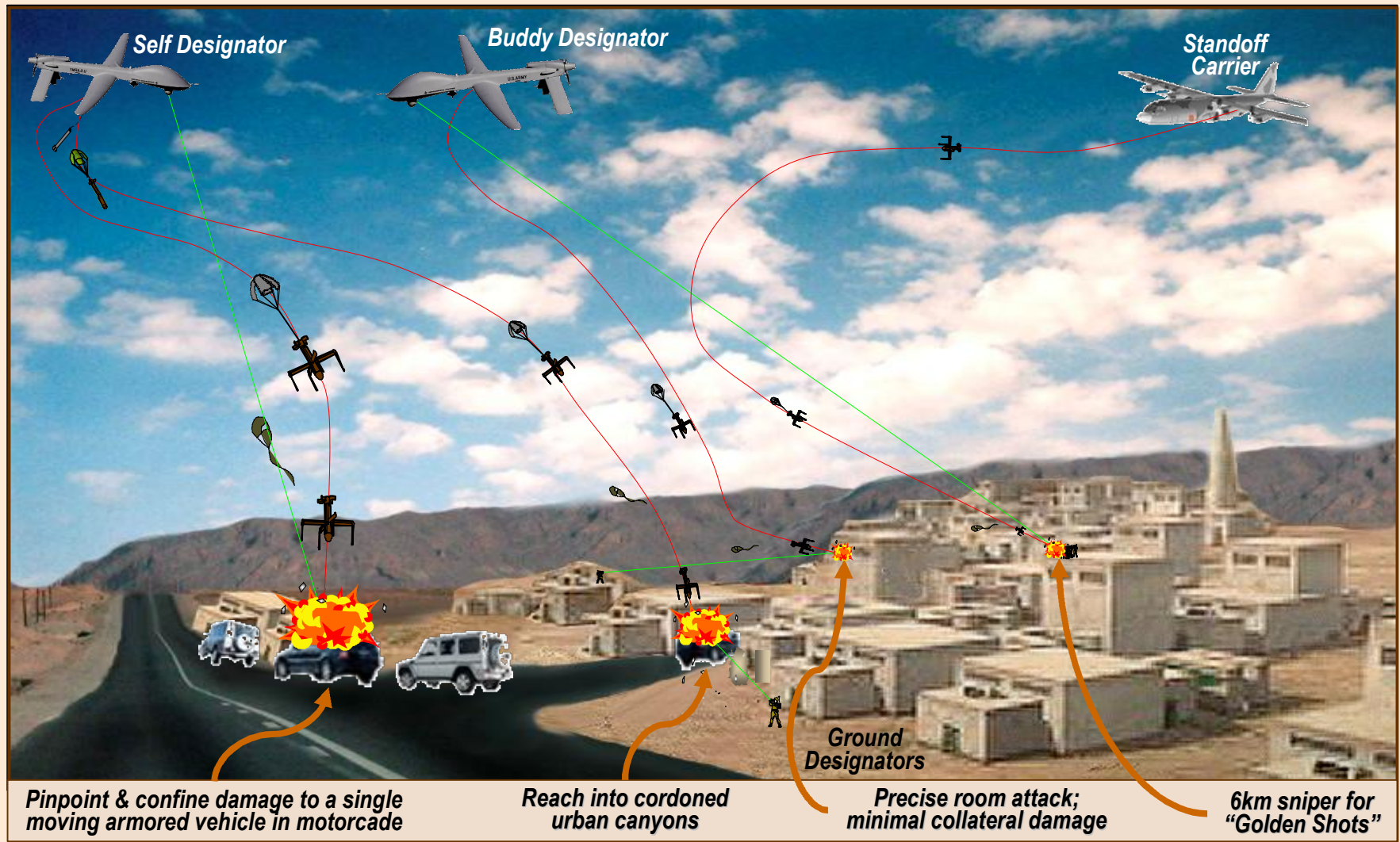
## Funding Candidates for Various Capability Improvements

	• GWOT	• AC-130	• Predator	• Warrior	• SOF	• C-RAM	• DASSP
• GPS Integrated	✓	✓			✓	✓	✓
• Extended Battery	✓	✓					
• Data Link (in-flight)	✓	✓					
• Reduced Weight							
• Reduced Size							
• Frag Warhead		✓					✓
• Height of Burst Fuse	✓	✓					
• Proximity Fuse		✓					
• Platform Integration	✓	✓	✓		✓	✓	✓

**Funded with Active Contracts** ✓



# Future Capabilities







**“In every generation, the world has produced enemies of human freedom. They have attacked America because we are freedom’s home and defender. The commitment of our fathers is now the calling of our time.”**

**President George W. Bush**

